Yukon-Charley Rivers National Preserve

Annual Report 2007

National Park Service
Department of the Interior

"Thousands of tired, nerve-shaken, over-civilized people
are beginning to find out that going to the mountain is going home;
that wildness is necessity;
that mountain parks and reservations are useful
not only as fountains of timber and irrigating rivers,
but as fountains of life."

John Muir

Message from the Acting Superintendent

As the final months of 2007 draw to a close, a number of changes are underway within the management of Yukon-Charley Rivers and Gates of the Arctic. In September, Dave Mills, Superintendent for 13 years, left the position to head up the NPS Regional Subsistence Team in Anchorage. Dave was saddened to leave his post at the helm of Yukon-Charley Rivers and Gates of the Arctic, but was looking forward to the challenges of his new role.

Dave Mills, after 13 years as Superintendent for Yukon-Charley Rivers National Preserve and Gates of the Arctic National Park and Preserve, bade farewell to Fairbanks at the end of September. Although sad to go, he was looking forward to his new position as head of the National Park Service's Regional Subsistence Team in Anchorage. Above, he and his wife, Ann Wildman, share memories of their years at "YUGA" with staff and other well wishers at a barbecue in their honor.

NPS Regional Director Marcia Blaszak and Deputy Director Vic Knox undertook a search for a new superintendent for these parks and in early October. They announced Greg Dudgeon, who is currently Superintendent at Sitka National Historic Park, as their choice for the position. Greg has also been Chief Ranger for Western Arctic parks in Kotzebue. Greg and his family are looking forward to their move to Fairbanks in mid-December.

For the months of October and November, I have been asked by the Regional Director to serve as the Parks' Acting Superintendent. I am pleased to fill that role and have been enjoying getting to know and working with the staff here. As part of the transition between Superintendents, the parks are undergoing a management review. This review will provide Greg with recommendations for organizational structure, communication strategies and project review processes. It's likely that these parks will be experiencing some significant changes well into 2008.

The field season was highly productive with a variety of projects researching wolves, Dall's sheep, moose, neo-tropical birds, peregrines, melting ice patches, ethnographic assessments and aquatic habitats. Visitation to the parks continues at steady pace and visitor experience and satisfaction ranks high. A number of new education programs have been instituted and these programs will continue to expand with the opening in 2008 of the Morris Thompson Cultural Center. You'll be reading more about these endeavors in the pages to follow.

I thank all those who contributed to this report and special thanks to Donna DiFolco for editing this publication and keeping the contributors on their toes. I hope you find it an enjoyable read.

Vicki Snitzler
Acting Superintendent

Purpose and Significance

Yukon-Charley Rivers National Preserve protects 115 miles of the 1,800-mile Yukon River and the entire Charley River basin. Rustic cabins and historic sites are reminders of the importance of the Yukon River during the 1898 gold rush. Paleontological and archeological sites add much to our knowledge of the environment thousands of years ago. Peregrine falcons nest in high bluffs overlooking the river, while rolling hills that make up the Preserve are home to an abundant array of wildlife. The Charley, a 100-mile wild river, is considered to be one of the most spectacular rivers in Alaska.




Purpose of Yukon-Charley Rivers National Preserve

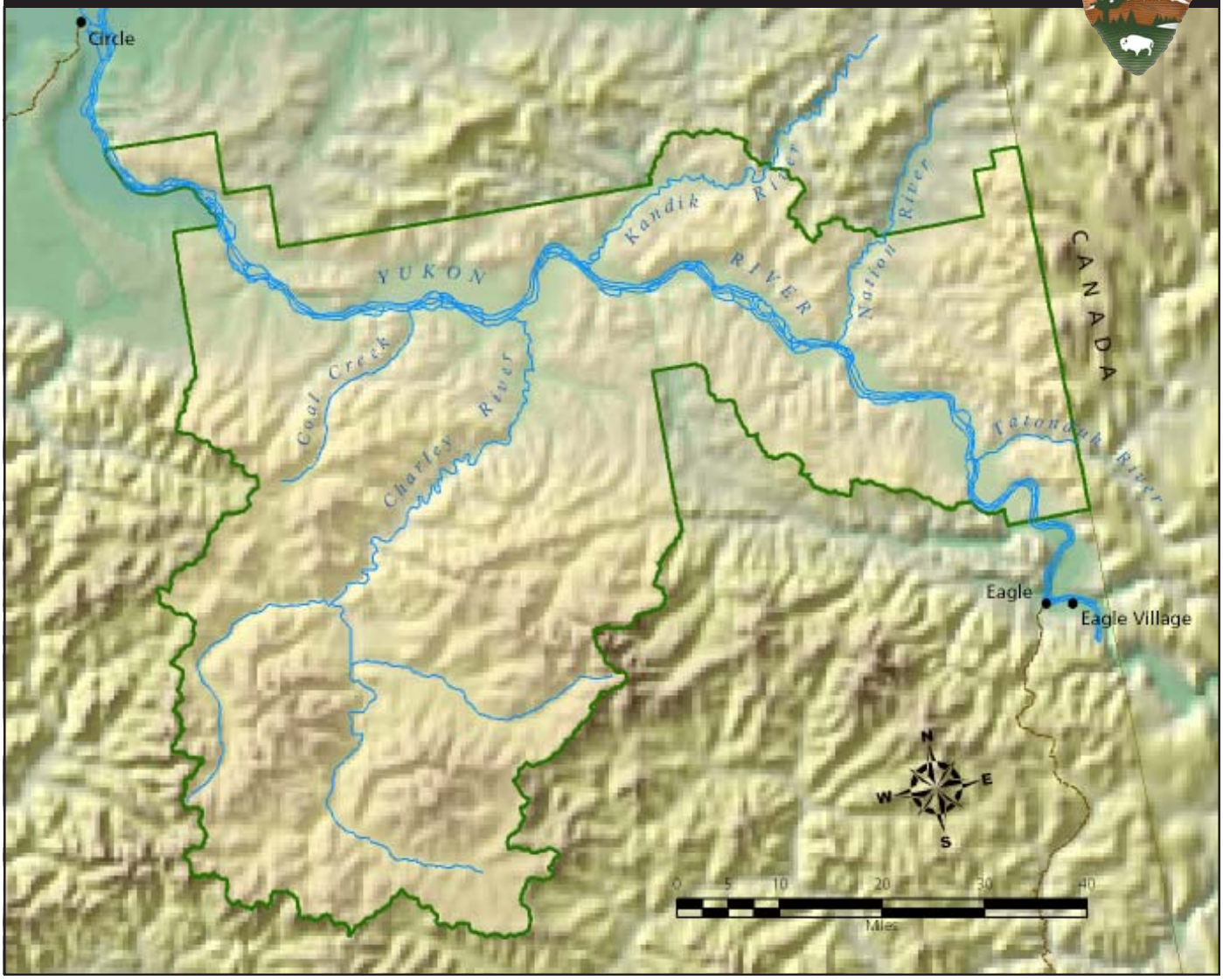
- Maintain environmental integrity of entire Charley River basin, including streams, lakes, and other natural features, in undeveloped natural condition for public benefit and scientific study;
- Protect habitat for and populations of fish and wildlife, including but not limited to peregrine falcons and other raptorial birds, caribou, moose, Dall sheep, grizzly bears, and wolves;
- And in a manner consistent with foregoing, protect and interpret historical sites and events associated with the Yukon River gold rush, and geological and paleontological history, and cultural prehistory of area; and
- Protect, conserve, and interpret natural and cultural resources of the Preserve while allowing for appropriate human uses in a manner that provides for similar opportunities for future use and enjoyment.

Significance of Yukon-Charley Rivers National Preserve

- An internationally significant assemblage of diverse geological and paleontological resources—unusually complete—provide at least a 600-million-year record stretching nearly back to the Precambrian era.
- The area between Nation, Kandik, and Yukon rivers is postulated to be a portion of the North American plate that has escaped deformation from geological forces, remaining geologically and paleontologically intact. Some of the oldest known microfossils have been found in this area.
- The entire Charley River watershed is protected in its undeveloped natural condition.
- The Preserve hosts one of the highest density populations of nesting American peregrine falcons in the United States.
- Portions of the Han and Kutchin Athabaskan traditional homelands lie within the Preserve.
- Sites preserving activities and events of regional significance associated with the gold rush era are present and exemplified by bucket dredges, mail trails, trapper's cabins, boats, roadhouses, water ditches, and machinery.
- The Yukon River is the largest natural, free-flowing river in the National Park System.
- Large areas within the Preserve may represent an unglaciated refugium for endemic floral and faunal communities.

Yukon-Charley Rivers National Preserve

National Park Service
U.S. Department of the Interior



Yukon-Charley Rivers National Preserve lies in eastern interior Alaska, bordering Yukon Territory, Canada. The Taylor Highway will take visitors as far as Eagle, where the Preserve's field office and Visitor Center are located. Travellers into the Preserve typically float the Yukon River, or charter an airplane to fly into the upper Charley River. Visitors are encouraged to check in at the office in Eagle to file a travel plan prior to their trip.

Within the Preserve, NPS staff maintain facilities, including a public use cabin at Coal Creek Camp, which also serves as a base for many resource projects. At Slaven's Roadhouse on the Yukon, visitors may enjoy learning about the area's rich mining history.

Table of Contents

Message from the Superintendent.....3

Purpose and Significance of Yukon-CharleyRivers National Preserve.....4

Map of Yukon-Charley Rivers National Preserve.....5

Performance and Results Section.....7-25

Preserve Resources.....7-20

Public Enjoyment and Visitor Experience.....21-25

FY 2007 Financial Summary.....26

Preserve Organization.....27

For more information, contact us:

Yukon-Charley Rivers National Preserve
4175 Geist Road
Fairbanks, Alaska
99709

(907)457-5752
www.nps.gov/yuch

Staff Contributors

Vicki Snitzler, Acting Superintendent
Robyn Burch, Chief of Administration
Aaron Wilson, Archaeologist
Lance Twitchell, Museum Collections Tech.
Amy Larsen, Aquatic Ecologist
John Burch, Wildlife Biologist
Melanie Flamme, Wildlife Biologist
Dave Krupa, Cultural Anthropologist
Pat Sanders, Interpretive Ranger
Scott Taylor, Park Pilot
Julia Youngblood, Facilities Mgt. Specialist

Editing

Donna DiFolco, Cartographic Technician
Tom Liebscher, Chief of Resource Mgt.

Layout and Design

Donna DiFolco, Cartographic Technician

Photos

by the National Park Service, unless noted otherwise

Cover photo: The view from inside of a cave in Yukon-Charley Rivers National Preserve. Read more about these rock shelters on page 7 of this year's annual report.

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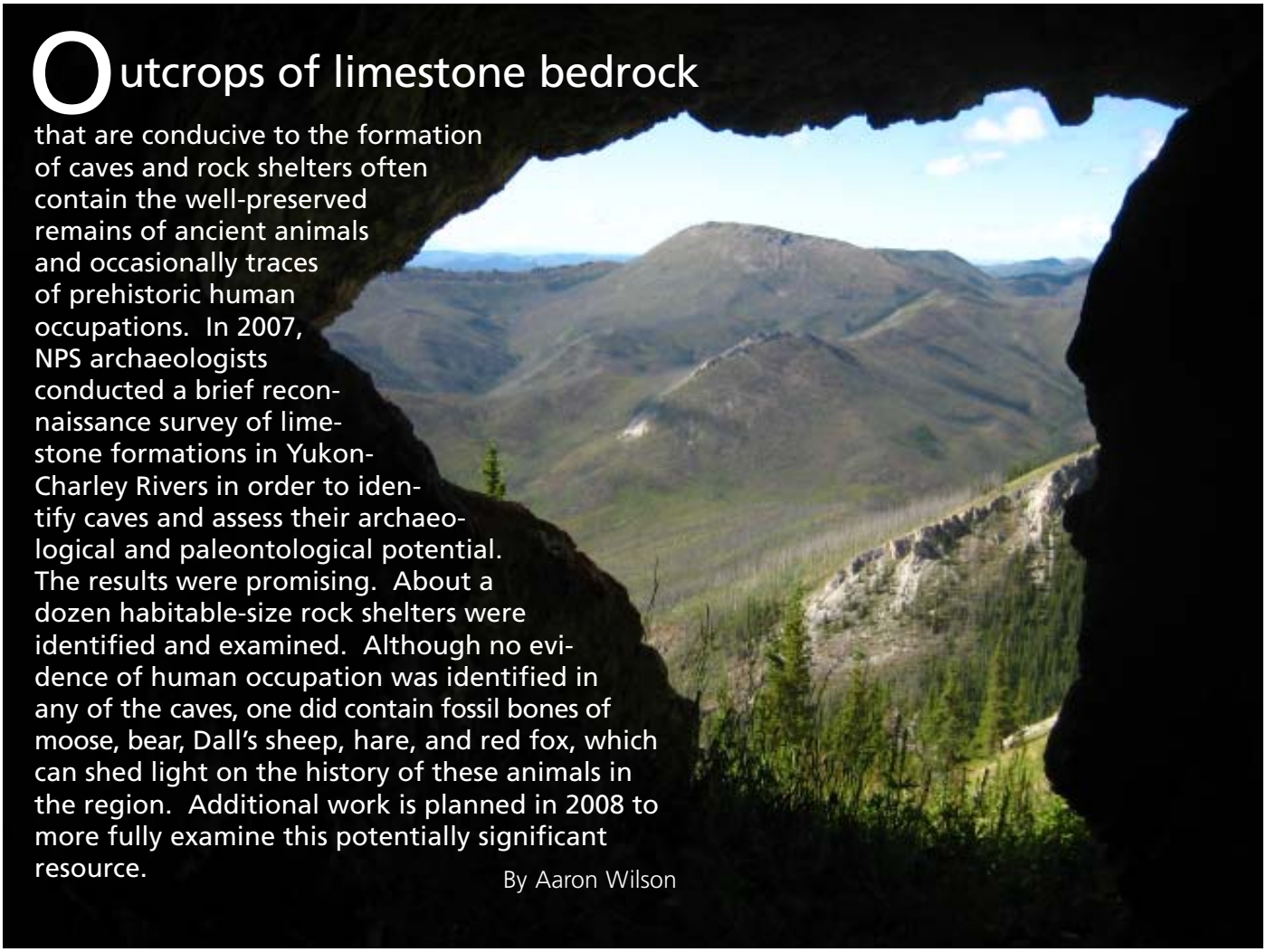
Preserve Resources

Natural and cultural resources and associated values at Yukon-Charley Rivers National Preserve are protected, restored and maintained in good condition and managed within their broader ecosystem and cultural context.

Editor's Note: You may notice there are no Long-term goals this year. That is because FY2007 was a one-year planning period, effectively making the "long-term goals" the same as the annual goals. Long-term goals are currently being revised and the next planning period will begin this year for FY2008-FY2012.

Annual Goal: By September 30, 2007, 195 (53% of 367) of Yukon-Charley Rivers National Preserve's archaeological sites are in good condition.
GOAL ACHIEVED



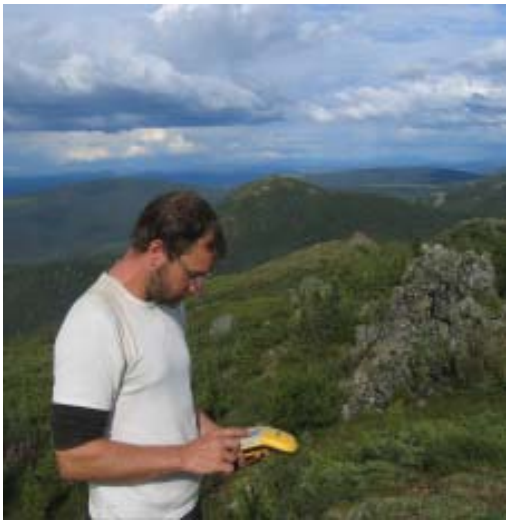
Outcrops of limestone bedrock that are conducive to the formation of caves and rock shelters often contain the well-preserved remains of ancient animals and occasionally traces of prehistoric human occupations. In 2007, NPS archaeologists conducted a brief reconnaissance survey of limestone formations in Yukon-Charley Rivers in order to identify caves and assess their archaeological and paleontological potential. The results were promising. About a dozen habitable-size rock shelters were identified and examined. Although no evidence of human occupation was identified in any of the caves, one did contain fossil bones of moose, bear, Dall's sheep, hare, and red fox, which can shed light on the history of these animals in the region. Additional work is planned in 2008 to more fully examine this potentially significant resource.

By Aaron Wilson

Foster-Keith Ridgeline Site Documented and Mapped

By Aaron Wilson

The Foster-Keith Site is the most expansive prehistoric archaeological site in Yukon-Charley Rivers, spanning the entire length of a seven-kilometer-long ridgeline. Evidence of prehistoric hunters include projectile points, scrapers, and tens of thousands of waste flakes, some of which may represent the earliest human occupation of the Preserve. In order to assess the condition of the site and to map the archaeological record, Preserve archaeologists spent four days documenting the expansive site. A highly-accurate handheld GPS unit was used to map the archaeological assemblages. As a result, the sprawling assemblage was separated into 32 spatially distinctive sites. The accurate GPS data and updated site records will aid in managing and interpreting this unique Preserve resource.



At left, NPS archaeologist Aaron Wilson maps the Foster-Keith Site with a highly accurate GPS. Archaeologists spent four days documenting the expansive site, which included projectile points, scrapers, tens of thousands of waste flakes, and the large bifacially flaked knife pictured above.

Sourcing of Archaeological Obsidian

By Aaron Wilson

National Park Service Cultural Resources team, in partnership with the Smithsonian Institution and the University of Alaska Museum, started a monumental task of assembling a database of all sourced obsidian from Alaskan archaeological sites. Obsidian, a volcanic glass, was used extensively by prehistoric people in manufacture of stone tools. Due to a unique chemical signature of each obsidian source, archaeologists can uncover the source of obsidian artifacts with the help of such archaeometric tools as non-destructive X-ray Fluorescence (XRF) and minimally destructive Inductively Coupled Plasma - Atomic Emission Spectroscopy (ICP-AMS). So far, close to 2000 obsidian artifacts have been sourced. The construction of this database will help researchers answer questions about human behavior such as raw material acquisition, familiarity with resources in a newly-settled landscape, and prehistoric trade routes. One of the most interesting topics is contact between Native Alaskans and their neighbors in the Far East of Russia, which has so far been demonstrated by the presence of Siberian obsidian in Alaska. The database will be made accessible to all Alaskan archaeologists who are contributing their collections for this analysis and will serve as a platform for many future research undertakings.

Yukon-Charley Rivers Archaeological Inventory Continues

By Aaron Wilson

Preserve archaeologists completed the second year of a four-year archaeological inventory that will span the Preserve. Work in 2007 focused primarily on the Yukon River itself, but also included one week of helicopter-supported survey along upland ridges. A total of 65 new sites were identified and 16 known sites were revisited. An estimated 34,000 acres were surveyed at a reconnaissance level. Volunteer assistance was provided by two students working for the University of Alaska Museum. Most prehistoric sites were stone tool scatters that date to the last few thousand years, while most of the revisited sites were historic cabins and roadhouses alongside the Yukon River.

A historic cabin along the Yukon River. The 2007 archaeological inventory included revisiting historic cabins and roadhouses along the Yukon River, as well as visiting prehistoric sites dating to the last few thousand years.

A total of 65 new sites were identified and 16 known sites were revisited. An estimated 34,000 acres were surveyed at a reconnaissance level.

Archaeological Scholars Offer Guidance, Support

By Aaron Wilson

Three archaeological and geoarchaeological scholars—Dr. Ted Goebel (Texas A&M University), Kelly Graf (Ph.D. candidate, University of Nevada Reno) and Ian Buvit (Ph.D. candidate, Washington State University)—joined Preserve archaeologists for a survey of the Yukon River. Interested in both the human actors and geological processes of the late Pleistocene and early Holocene, these scholars offered their expert guidance and support during their stay.

NPS archaeologist Natasha Slobodina investigates a Pleistocene ice lens along the Yukon River.

Interesting finds include several archaeological sites, deep stratigraphy showing evidence of ancient volcanic eruptions which covered the landscape in ash, and several large ice lenses along a Yukon River cutbank. These crystal-clear lenses are lingering remnants of the Pleistocene ice age. Interpretation and advice from these scholars will prove invaluable during future archaeological research along the river.

Annual goal: By September 30, 2007, 3,694 acres of Yukon-Charley Rivers National Preserve's lakes, reservoirs, etc. (89% of 4,150 acres) meet State water quality standards.
GOAL ACHIEVED

Lake Chemistry Near Pre-fire Conditions Three Years After Fire

By Amy Larsen

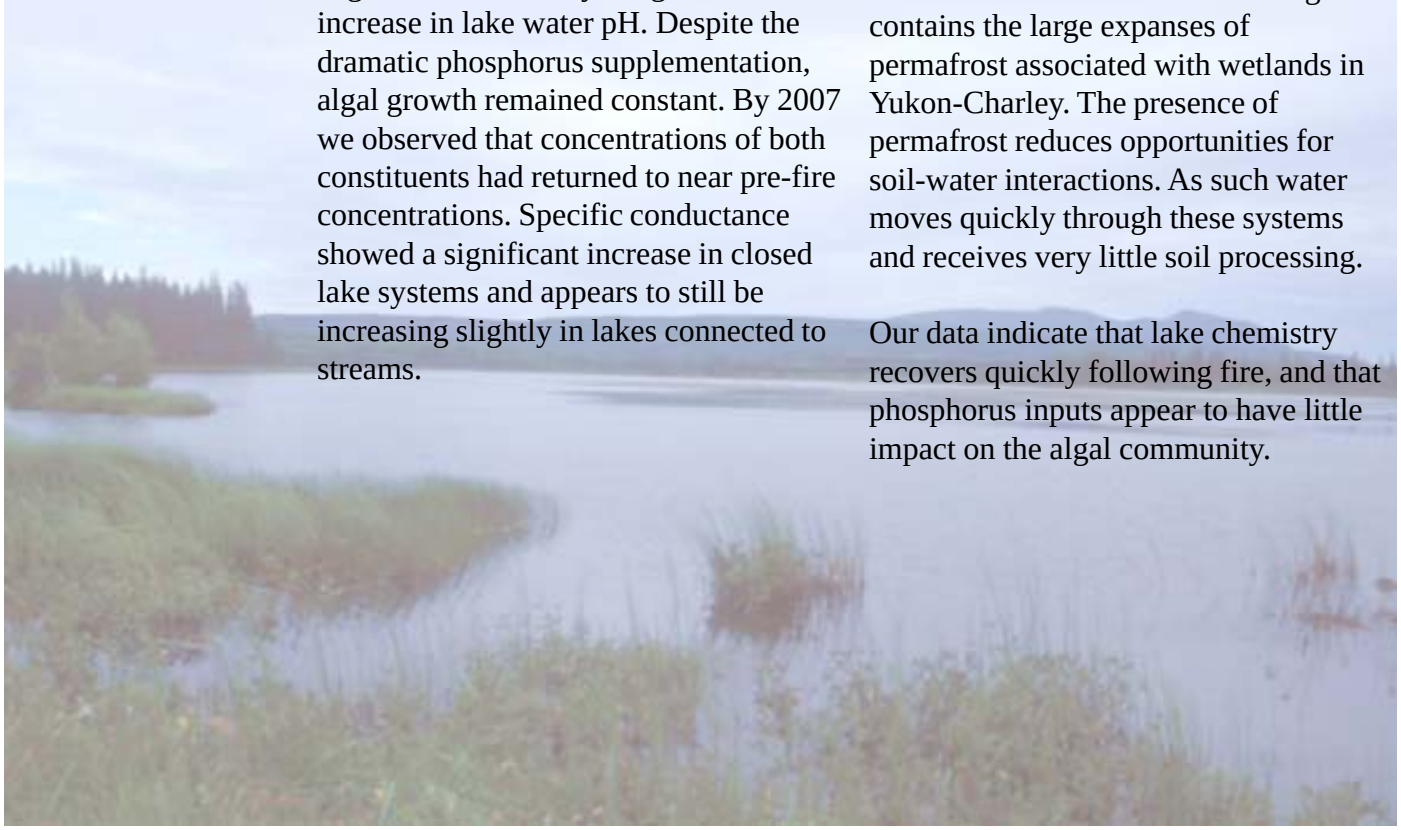
Our data indicate that lake chemistry recovers quickly following fire, and that phosphorus inputs appear to have little impact on the algal community.

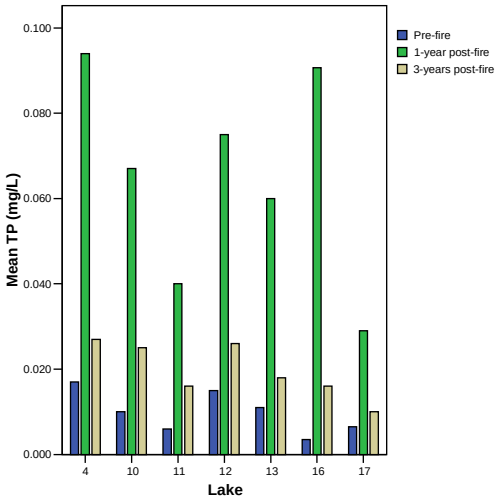
In 2004 we began monitoring a small number of shallow lakes within the boundaries of the Edwards Creek Fire. We sampled seven lakes directly after the fire—these measurements served as pre-fire data—and again one and three years following fire. These data were collected to provide basic information on the effects of fire on lake chemistry and the recovery rate of lakes following fire.

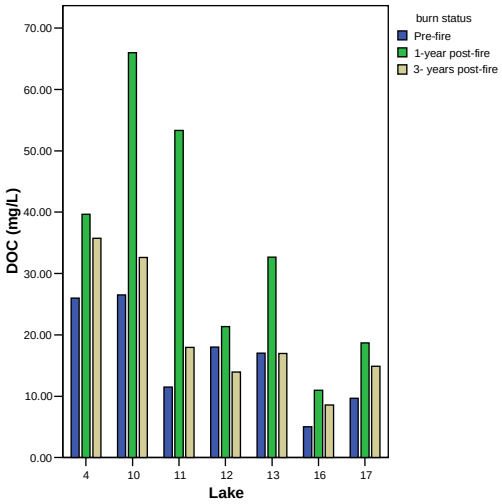
We observed a 6-fold increase in total phosphorus (TP) one year following fire, and dissolved organic carbon (DOC) more than doubled (see graphs on following page). We also observed a slight, but statistically insignificant, increase in lake water pH. Despite the dramatic phosphorus supplementation, algal growth remained constant. By 2007 we observed that concentrations of both constituents had returned to near pre-fire concentrations. Specific conductance showed a significant increase in closed lake systems and appears to still be increasing slightly in lakes connected to streams.

Relatively little is currently known about the long term impacts of fire on shallow lake ecosystems in Alaska. Many responses to fire found in shallow lakes in granite dominated regions of the boreal forest are known to be short lived changes in the concentrations of K^+, Cl^-, NO_3^-, SO_4^{2-}, while others appear to be more long lived, such as changes in TP and DOC. Other authors have suggested that post-fire recovery of water quality in organic rich regions would be considerably slower than has been documented in regions with thin organic soils where nutrient additions were large but short lived. Neither of these regions contains the large expanses of permafrost associated with wetlands in Yukon-Charley. The presence of permafrost reduces opportunities for soil-water interactions. As such water moves quickly through these systems and receives very little soil processing.

Our data indicate that lake chemistry recovers quickly following fire, and that phosphorus inputs appear to have little impact on the algal community.







One year following fire, we measured a 6-fold increase in total phosphorus (TP, far left), while dissolved organic carbon (DOC) had more than doubled. Despite the dramatic phosphorus supplementation, algal growth remained constant. By 2007, concentrations of both constituents had returned to near pre-fire concentrations.

Large quantities of sediment were deposited following fire in open lake systems. The impacts of this sediment are not easily quantified; however, we expect the long-term consequence of this sediment input is reduced lake longevity.

Extensive permafrost degradation occurred along many lake margins. We were unable to date the karsting and did not map the extensive melting. The long-term impacts of melting range from lake expansion or drainage to nutrient supplementation and increased methane emissions.

The National Park Service contributes to knowledge about natural and cultural resources and associated values; management decisions about resources and visitors are based on adequate scholarly and scientific information.

Annual Goal: By September 30, 2007, 1 population (10% of 10) of Yukon-Charley Rivers National Preserve's species of management concern are managed to desired condition or additional information is acquired that will help develop a desired condition.
GOAL EXCEEDED

Wolf Population Monitoring Finds Low Wolf Numbers

By John Burch

This marks the 14th year the wolf population has been monitored in Yukon-Charley Rivers National Preserve. Over the past 3 years the Central Alaska Network partnered with Yukon-Charley to accomplish this monitoring.

Last winter we captured and radio-collared 9 wolves in 8 packs; 4 of the 8 packs were new. Over 80% of the total funds were spent snow-tracking, searching for, and capturing wolves in or near the Preserve boundary. This past winter, as the project was plagued by poor snow conditions and bad weather, finding uncollared wolf packs was very difficult and expensive.

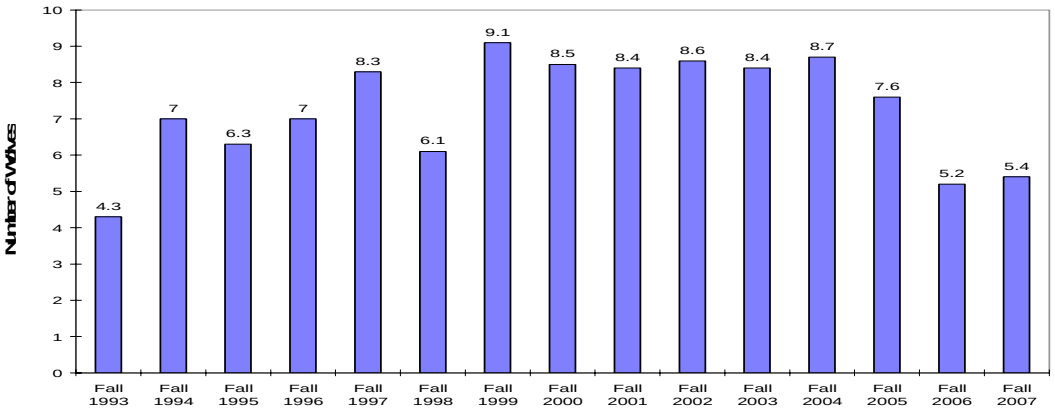
From this effort we have learned that some historic packs have disappeared and their old home range usurped by 2 or more newly formed pairs, whereas other home ranges have shifted geographically. There appear to be at least 4 additional wolf packs that use substantial amounts of the Preserve that we were unable to find and capture, they will be a top priority to find, radio-collar, and count this coming winter.

In a preliminary count, the Fall 2007 mean pack size of 5.4 wolves in the Preserve is slightly larger than last Fall's count of 5.2, following a spring (April) 2007 all-time low mean pack size of 2.3. A comparison of Fall mean pack size back through time also indicated a drop in wolf numbers from past years, although the Fall 2007 estimate may increase as we get better pack counts in November. So far this fall we can confirm at least 19 pups were produced in 6 Preserve packs and have survived to mid-September. Two other packs appear to have lost their pups. GPS radio-collars with an ARGOS data download continue to make Yukon-Charley's wolf population monitoring more accurate, consistent and efficient.

Wolf management in the area of Yukon-Charley Rivers National Preserve and the entire Fortymile region has been controversial and turbulent for many decades. Starting in January 2005, aerial wolf control occurred right up against a small portion of the Preserve boundary killing 5 wolves from one Preserve pack, and 6 more from a different Preserve pack were killed in November 2005. Beginning September 1, 2006, the aerial wolf control area was greatly expanded to surround the entire Preserve south of the Yukon River. Last winter saw only 11

wolves shot from airplanes in the entire control area due to poor snow and flying conditions. Cooperative efforts and discussions continue with Alaska Department of Fish and Game to ensure that natural and healthy populations of wolves residing in the Preserve continue. The information gathered by this study and the Central Alaska Network will be instrumental in allowing NPS managers to make informed, science-based decisions regarding wolves and wolf management in Yukon-Charley Rivers National Preserve.

Pilot Sandy Hamilton records data while NPS wildlife biologist John Burch prepares a radio collar for a sedated wolf in Yukon-Charley Rivers National Preserve.



This graph shows a comparison of Fall mean pack size back through time, indicating a drop in wolf numbers from past years. In a preliminary count, the Fall 2007 mean pack size of 5.4 wolves in the Preserve is slightly larger than last Fall's count of 5.2.

Accomplishments

- Measured all-time population low April 2007 of 1.7 wolves/1000km² (or about 17 wolves in the Preserve).
- Documented aerial and ground-based harvest from Preserve packs for winter 06-07 (0 aerial, 4 ground-based, preliminary).
- Estimated wolf density for 2006-2007: Fall '06 = 3.4 wolves/1000 km²; Spring '07 = 1.7 wolves/1000km².
- Calculated pup production and survival to Fall: mean litter size 2006 = 4.3; mean litter size Fall 2007 = 3.2.
- Captured and collared 9 wolves in 8 packs despite extremely poor snow and weather conditions.

Volunteer Chris Florian and wildlife biologist John Burch scan the bluffs at Nation Reef for American Peregrine Falcons during a 2-week monitoring effort along the Yukon River in May.

Long-term Monitoring of American Peregrine Falcons Continues

By Melanie Flamme

Forty-nine occupied territories were observed in 2007, a nearly 5-fold increase since 1975.

2007 marked the 32nd consecutive year of monitoring American Peregrine Falcons along the Upper Yukon River corridor. American Peregrine Falcons were selected by the Central Alaska Network as one of the vital signs to be monitored within Yukon-Charley Rivers National Preserve, Alaska to determine ecosystem health. This area is 1 of 2 index study areas for Alaska. The population within the Upper Yukon River corridor is believed to be one of the densest populations in North America, and also has one of the longest and most complete recorded datasets for the species. The survey is conducted between Circle, Alaska, and the border of Yukon Territory, Canada, and is accessed by boat. From 17 May to 1 June 2007, all known territories along the study area were surveyed to identify occupied territories. Nest success and productivity were determined during a second survey period, conducted 7-18 July 2007. The number of occupied territories within the study area has shown a steady increase since the species neared extinction in the early 1970's because of nest failure caused by DDT contamination. Forty-nine occupied territories were observed in 2007, which is nearly a 5-fold increase since 1975. The number of nestlings, though variable among years, has also increased from 17 in 1975 to 84 in 2007.

Survey Detects 30 Bird Species

By Melanie Flamme

The North American Breeding Bird Survey (BBS) is a long-term, large-scale, international avian monitoring program initiated in 1966 to track the status and trends of North American bird populations. The BBS program is jointly coordinated by the USGS Patuxent Wildlife Research Center and the Canadian Wildlife Service.

The program was started to track trends in North American bird populations over large geographic areas after the devastating population declines from the use of DDT and other pesticides. BBS continues to monitor bird populations across North America today to inform researchers and wildlife managers of significant changes in bird population levels. Each year during the peak of the breeding season, skilled participants throughout the U. S. and Canada collect bird population data along roadside survey routes. Over 4,100 survey routes are located across the U.S. and Canada.

This year, Yukon-Charley Rivers National Preserve participated by conducting the Eagle Survey BBS route along the Taylor Highway. In all, 30 bird species were tallied, including:

Golden Eagle
Willow Ptarmigan
Wandering Tattler
Three-toed Woodpecker
Violet-green Swallow
Yellow-bellied Flycatcher
Alder Flycatcher
Hammond's Flycatcher
Least Flycatcher
Olive-sided Flycatcher
White-crowned Sparrow
Chipping Sparrow
Fox Sparrow
Lincoln's Sparrow
Savannah Sparrow
Townsend's Warbler

Hear that? It's an Olive-sided Flycatcher! Beginning at local sunrise, or 2:25 a.m., bird surveyors start the day with keen eyes and atuned ears to record all detections of birds within a quarter mile of each point along a 24.5-mile route on the Taylor Highway. This year, Eagle high-school Volunteer Amanda Westfall (left) timed the 3-minute points and navigated the route while Central Alaska Network Visual Information Specialist Laura Weaver (right) was record keeper. Wildlife biologist Melanie Flamme used sight and hearing to detect 30 different species of birds along the route.

Orange-crowned Warbler
Wilson's Warbler
Yellow-rumped Warbler
Swainson's Thrush
Varied Thrush
Gray-cheeked Thrush
American Robin
Northern Waterthrush
Gray Jay
Common Raven
Common Redpoll
Ruby-crowned Kinglet
Dark-eyed Junco
Western Wood PeeWee

Moose Survey Reveals a Low Density, but Stable Population

By John Burch

During this (survey), 180 moose were seen (89 cows, 28 calves, 63 bulls). When statistics are applied to this sample, we came up with a total population of 726 moose, give or take about 140 moose.

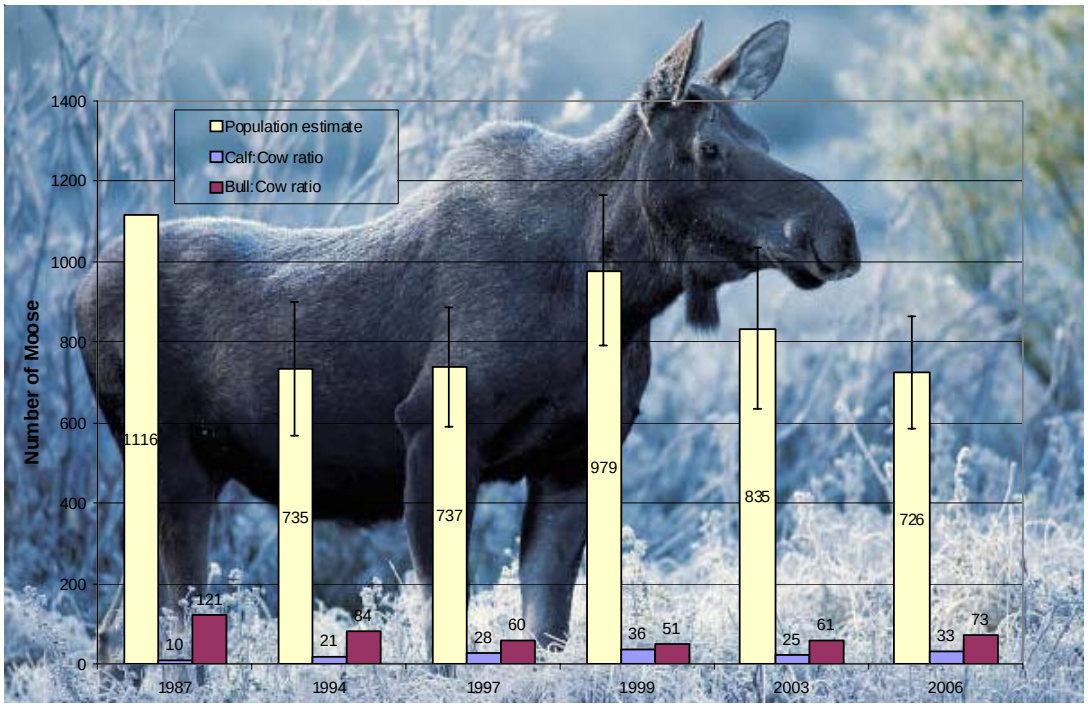
In partnership with the Central Alaska Network , we conducted an aerial moose survey in Yukon-Charley Rivers National Preserve November 6 – 12, 2006.

The survey area covered over 3,000 square miles in the Yukon River Valley between Eagle and Circle consisting of 555 survey units. Of the 3,000 mi², 841 mi² (or 151 survey units) were thoroughly searched via airplane for moose. During this flying, 180 moose were seen (89 cows, 28 calves [including 5 sets of twins], and 63 bulls [6 were spike-fork or yearling bulls]). These survey results indicate a total population of 726 moose, give or take about 140 moose.

This is the 6th moose survey to be conducted in this area. The first one was in 1987. When comparing the 2006 survey to past surveys we find a low density but stable moose population in Yukon-Charley. The 1987 and 1994 surveys were conducted a little differently, and thus are not directly comparable, but they do give an idea of what was found at that time. The moose population is assumed to be stable because the all the confident limits in the figure shown below overlap.

Moose harvest within the Preserve was 29 in fall 2006 and has averaged 26 bulls per year over the last 20 years. Because the bull:cow ratio is good and increasing slightly, it is unlikely that human harvest of bulls is having any detrimental affects on the population. Some Alaskans think this region could support many more moose than currently exists and that both moose and caribou populations are limited by wolf and bear predation. No one knows for sure if this is correct, and no thorough studies have been conducted to measure the quantity and quality of moose browse in the Preserve.

The information gathered by this study and the Central Alaska Network will be instrumental in allowing NPS managers to make informed, science-based decisions regarding moose management in



This graph shows trends in moose population size (yellow bars), calf:cow ratios (blue bars), and bull:cow ratios (red bars), in Yukon-Charley Rivers National Preserve from 1987 to 2006. When comparing the 2006 survey to past surveys, we find we have a low density but stable moose population.

Yukon-Charley Rivers National Preserve.

Accomplishments

- Estimated the overall moose population at about 726 moose or 0.234 moose/mi^2
- Estimated the composition of the moose population at 33 calves/100 cows, 14 yearlings/100 cows, and 73 bulls/100 cows.
- Documented and evaluated the annual harvest of moose from the Preserve.
- Determined that current human harvest of moose is not detrimental to the population.

Second Year of Network Vital Signs Monitoring in Yukon-Charley

By Maggie MacCluskie

The 2007 field season was the second year of formal implementation for the Central Alaska Network (CAKN) Vital Signs Monitoring program. The focus of the CAKN monitoring program during the first three years of implementation is to establish monitoring for the first 110f 37 vital signs of the program. Of the 11 initial vital signs, seven will be conducted in Yukon-Charley including climate, snow pack, vegetation structure and composition, shallow lakes, peregrine falcons, moose and wolves.

The CAKN provides full support for monitoring climate, snow pack, and vegetation structure and composition. For shallow lakes, peregrine falcons, moose, and wolves, the network and Yukon-Charley have a cost-sharing agreement where both entities contribute staff time and/or funds to cover monitoring efforts. Such an arrangement allows the network to monitor more vital signs than would be possible if the network provided sole funding to the program and promotes the integration of the Vital Signs Monitoring Program with the resource programs of the network parks.

Accomplishments:

- Completed climate and snow pack monitoring. Visited site installations for annual climate station maintenance, and snow markers.
- Conducted vegetation monitoring. The field season was curtailed, however, due to wild fires. The full vegetation grid (25 sample points) at Kathul Mountain was completed and 12 sample points were completed at the Sam Creek grid. Nevertheless, the 2007 season allowed us to refine planning and logistic considerations and will further our ability to monitor in the long-term.
- This marks the 14th year the wolf population has been monitored in Yukon-Charley (see pages 12-13 of this report); since FY2005, the CAKN has partnered with the Preserve to accomplish that monitoring.

IT Specialist Paul Atkinson assists with annual maintenance on the climate station located in the Upper Charley drainage in July.

Cost-sharing... allows the network to monitor more vital signs than would be possible if the network provided sole funding...

Documenting Traditional Ecological Knowledge of the Upper Yukon Salmon Fishery

By Dave Krupa

Since the project began in 2004, a total of 50 interviewees ... were recorded, producing roughly 42 hours of video/audio tapes.

Fieldwork was completed in August 2007 on a multiyear project to document local knowledge of the Upper Yukon Salmon Fishery. Interview topics included observations about the stock status and health of the salmon runs, local harvest and processing techniques, and recommendations for better management of fisheries.

Since the project began in 2004, a total of 50 interviewees (about 42 key consultants) were recorded, producing roughly 42 hours of video/audio tapes. These recordings were transcribed, edited, and compiled for inclusion in the final report. A total of 10 local residents from Central, Circle, Eagle, and Eagle Village worked as research assistants on interviews, and three locally hired boat operators assisted in visits to area fish camps. Four UAF student interns worked on the projects under supervision from Cultural Resource Specialist Dave Krupa at the Fairbanks NPS office.

Accomplishments and Products

- Two interpretive posters (also printed as "placemats" for project participants);
- Copies of all interviews and transcripts for project participants and available for viewing by park staff, researchers, and the interested public;
- Two PowerPoint presentations on project results;
- First annual report;
- Compilation of videotaped highlights from the interviews (being completed this semester as a student intern project);
- A final report summarizing research results and recommendations (final draft to be completed Dec. 21, 2007);
- Significant capacity building in local communities for future collaborative cultural and natural resource projects;
- Archival photo and video collections at UAF were studied for fisheries content and reveal consistent anecdotal visual evidence of larger fish size in the past.

Upper Yukon River fishers have noticed Chinook salmon getting smaller in recent years. Written and oral accounts from earlier years seem to support this observation, as do historic fish photos from the area (see left), especially compared to typical Chinook caught in recent times (see below).

Annual Goal: By September 30, 2007, Yukon-Charley Rivers National Preserve will continue to develop relationships with local people and incorporate traditional knowledge into the decision making process.
GOAL ACHIEVED

Ethnographic Overview and Assessment

By Dave Krupa

NPS cultural resource staff has partnered with the University of Alaska Fairbanks Alaska Native Studies Program on a three-year project to produce a professional cultural anthropological Overview and Analysis of Native and non-Native peoples associated with Yukon-Charley Rivers National Preserve.

A work plan is being developed for collation and synopsis of relevant historical and contemporary information and source material into a publishable overview of the rich and diverse history and culture of the communities and people affiliated with the Preserve. The overview will interest the public and will help Preserve managers better understand local history and culture of Yukon-Charley Rivers communities.

Interview with Alaska NPS Retiree Steve Ulvi

By Dave Krupa

Retired Management Assistant/Planner Steve Ulvi was interviewed at his home in Fairbanks, Alaska, as part of a project to document the administrative history of NPS in Alaska. The wide-ranging and lively interview chronicled Steve's path from living a subsistence based life along the Upper Yukon River in the 1970s, to seasonal ranger work with Yukon-Charley National Preserve, up to and including his key role in managing the subsistence program at Gates of the Arctic National Park and Preserve, and eventually heading up a back-country and Wilderness park planning effort.

Steve Ulvi relaxes outside his home in Fairbanks. Ulvi worked roughly 25 years for the National Park Service in Yukon-Charley Rivers National Preserve and Gates of the Arctic National Park and Preserve.

A copy of the interview is available on DVD and a transcript also is available.

Museum Collections

By Lance Twitchell

Collections Management has focused on organizing existing collections management data and practices, and implementing methods and resources to make the collections more visible, accessible, accurate, and efficient. As Gates of the Arctic shares its personnel resources with Yukon-Charley Rivers National Preserve, these efforts are combined for both park units. Highlights of the year included: 1) managing one of the largest recorded years of accessioning items; 2) recording the largest cataloging effort for Gates of the Arctic and Yukon-Charley Rivers with over 30,000 items cataloged between the two park units; and 3) hosting the Digital Imaging Project team from Harpers Ferry Center who professionally photographed over 300 items from Gates of the Arctic and Yukon-Charley Rivers. The digital images will be added to an increasing and improving collection of digital images of our collection. These images will be made available when the Gates of the Arctic and Yukon-Charley Rivers collections are placed online in FY 2008.

Provide for the Public Enjoyment and Visitor Experience

Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of preserve facilities, services, and appropriate recreational opportunities.

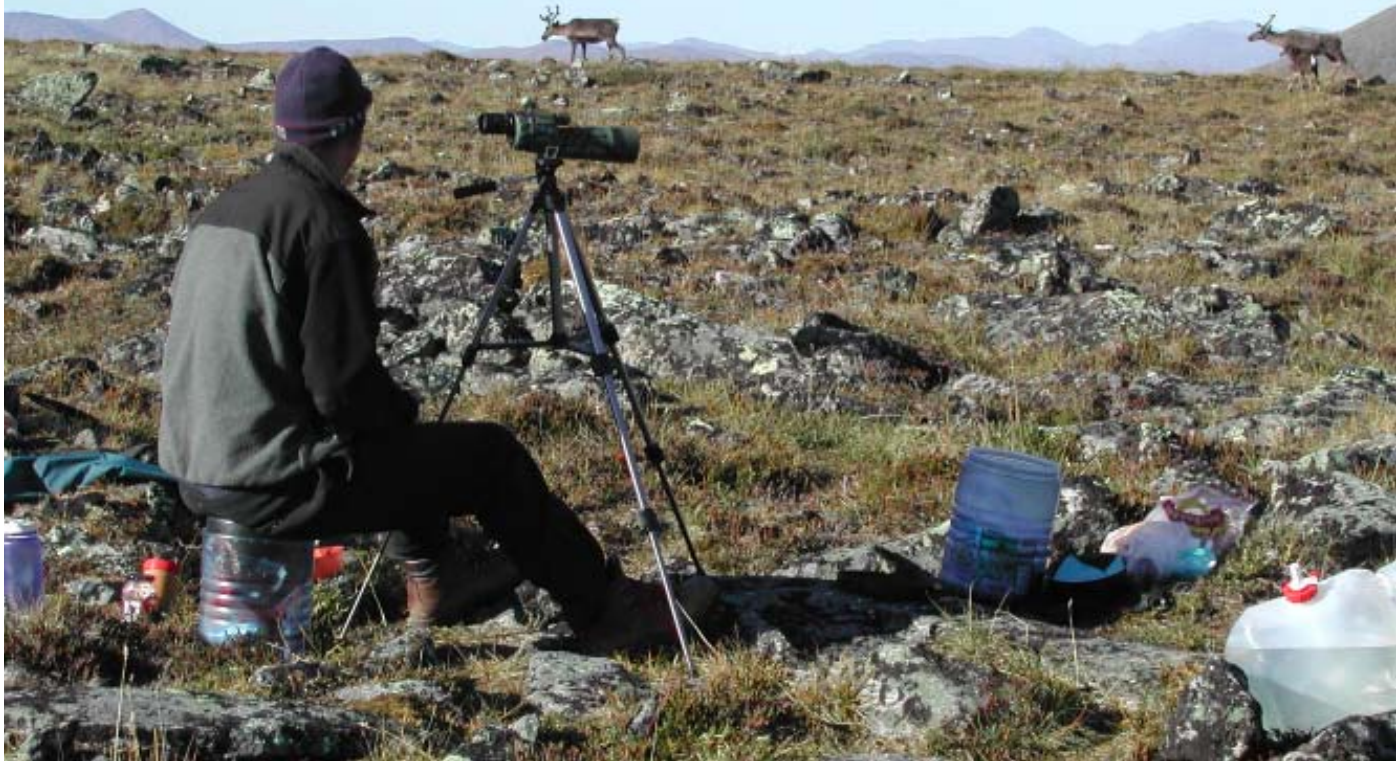
Overland Patrols Lead to Photo Opportunities

By Pat Sanders

Noting increases in back-country hiking, Yukon-Charley Rivers personnel traveled overland on several patrols this past season. These patrols opened a new opportunity for interpreting with photos to show visitors areas not normally seen by the river traveler.

Images of caribou, sheep and scenic panoramas are now included in the photo database for reproduction and website entries. The database continues to grow and staff is currently entering all digital images into a format that will allow queries by others wishing to use them for reports or interpretation. Some photos have been entered onto the Preserve website with others to follow shortly.

Images have proved invaluable for planning efforts and when safety issues are addressed. Aerial photographs along the Charley River help identify places where the adventurous traveler can plan portages and become better informed for river travel. All these photos allow visitors to better glimpse the country and educate themselves more fully before visiting. The photographic database will also assist students and potential visitors worldwide in their endeavors to better understand and learn about the area.



Glenn Creek Cabin Repaired

By Julia Youngblood

Before: The Glenn Creek Public Use Cabin on the banks of the Yukon River was showing signs of decay, particulary on the ends of the saddle-notched logs.

After: Yukon-Charley ranger Rich Baerwald and SCA volunteer Lincoln Gable removed the rotting log ends and replaced them with cut-to-fit replacements. The Glenn Creek Cabin is now ready for several more years of public use along the Yukon River.

The Glenn Creek cabin sits on the bank of the Yukon River as it has since the 1950s when it was constructed by Dr. Lefevre of Fairbanks. The cabin is a popular one with boaters along the Yukon River, but over the years, the weather and insects have taken a greater toll on the cabin than has the visiting public. The greatest damage had occurred on the ends of the saddle-notched logs. With the Cabin Maintenance Plan established in 2001 by former Preserve historian, Doug Beckstead, as a guiding document, a request for funding the log end repairs as well as additional maintenance was entered into the PMIS system. Funding was granted in the spring of 2006 and initial work was begun on the cabin. Historical architect Steve Peterson, in the Alaska Regional office, was contacted for his assistance in reaching the most cost effective method for repairing or replacing the log ends while maintaining the historical integrity of the cabin.

By the summer of 2007, materials and labor were available to begin the repairs to the log ends as well as address several outstanding maintenance issues. Yukon-Charley ranger Rich Baerwald and SCA Lincoln Gable tackled the job of removing the rotting log ends and replacing them with cut-to-fit replacements. Additional work included support for the stove pipe, treatment of carpenter ants, chinking in some areas and reattachment of the original roof gutters that were located in the nearby woods.

Glenn Creek Cabin is now ready for several more years of public use along the Yukon River.

Among the more significant investigations conducted this summer was one of a mining/dredging operation, using the 10" four-cylinder dredge shown here, operating near the confluence of Bonanza Creek on the Charley River.

Pardon me, but do you have a permit for that thing?

By Scott Taylor

Despite staffing shortages, the Visitor and Resource Protection division had another productive year assisting visitors, investigating incidents, and protecting resources. Patrols and other seasonal objectives were accomplished with the help of volunteers, maintenance employees, ranger/pilots from nearby parks, and a ranger detailed from Texas. Numerous extended patrols were conducted on foot, or by raft, jetboat, and airplane.

Camping-related offenses were among the most often addressed by rangers on patrol. These include improper food storage and non-compliance with "Leave-No-Trace" concepts.

Improper food storage at an unattended camp along the Yukon River. Educating the public on proper food storage remains a high priority for the Visitor and Resource Protection division at Yukon-Charley Rivers National Preserve.

Illegal construction at a hunting camp along the Yukon River. This photo is an example of the many camping-related offenses in obvious non-compliance with "Leave-No-Trace" concepts observed by rangers in the 2007 season.

Park visitors and the general public understand and appreciate the preservation of parks and their resources for this and future generations.

Annual Goal: By September 30, 2007, 84% of visitors to Yukon-Charley Rivers National Preserve understand the significance of the Preserve.
GOAL ACHIEVED

Students Plotting with Staff for Better Understanding

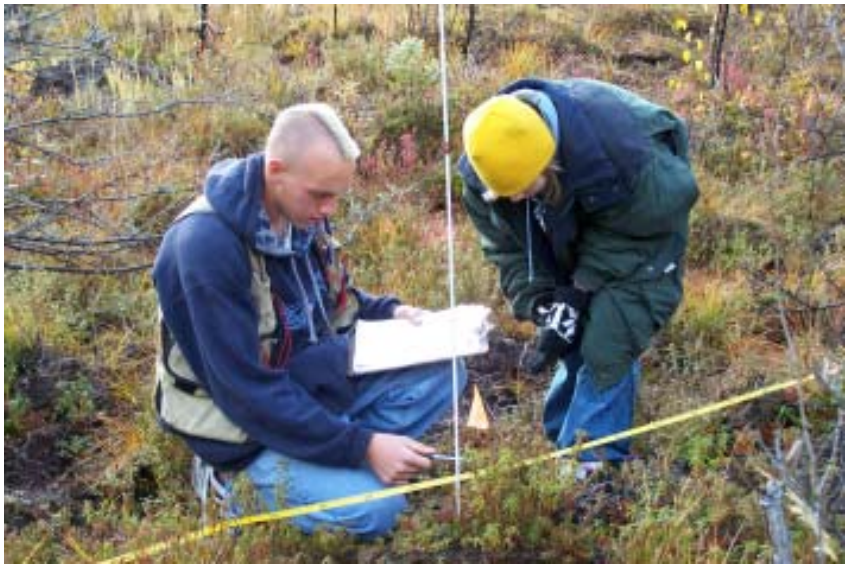
By Pat Sanders

The third annual Yukon Education Adventure (YEA), student outreach program was an extraordinary success thanks to the efforts of Fairbanks NPS fire professionals, cultural resources program, and interpreters. Students at Eagle Community School have worked closely with the fire program for several years, and have placed a number of fire plot locations along the Taylor Highway and Coal Creek area. This year, students studied flora identification, soil sampling, GPS instruction, mining history, water quality, and geology. Along with their teacher, chaperones and park professionals assisted students throughout the three-day, two-night outreach program.

Letters received from students afterward indicate that, not only are students learning and retaining information, they also are making suggestions for improving future programs and are actively assisting younger students in study topics.

Each year, several pre-trip programs conducted with students reinforce bear safety and Leave No Trace principles. Students kept journals again this year and have suggested that the evening "ghost story time" be made into a book for future students to enjoy.

For the first time, an overnight environmental education camp was conducted in Eagle by a representative of Tanana Chief's Conference. NPS personnel were asked to teach during the camp. Topics included climate change, wilderness ethics, and orienteering. This program included local students ranging from pre-school to high school and was well attended by both Eagle School students and local correspondence students.



Students from the Eagle Community School record vegetation along plot transects at Coal Creek in order to determine how recent fires have changed vegetation cover.

Partnerships Enhance Visitor Experience

By Pat Sanders

Working in concert with the Bureau of Land Management and the Youth Conservation Corps, the interpretation programs offered to visitors this past season were enhanced and strengthened. BLM volunteers assisted in staffing the visitor center during peak visitation and the Youth Conservation Corps student was a fount of information on local lore and lifestyle. With this additional help, and the assistance of volunteers, interpreters conducted higher quality programs for visitors.

A variety of daily programs were offered. Formal programs included climate change, subsistence lifestyles, dog sledding, mining and fire history, and a particular favorite was, "The woman who only shops twice a year." The warm, dry summer allowed many programs to be held outdoors as tour bus visitors enjoyed their lunches. The new Peregrine Falcon viewing deck was enjoyed each day by many visitors hoping to catch a glimpse of the falcons. Although the eyrie was not visible this year, visitors enjoyed watching the adult birds perching on the rocks of Eagle Bluff while scouting for food. The viewing deck also afforded the opportunity to view other wildlife emerging from wooded areas along the Yukon River. Several Dall's sheep were seen on the bluff and brought locals and visitors to the deck to watch.

Visitors were encouraged to make their own birch bark drinking cups following basket crafting demonstrations. Demonstrations of weapons used by the Han Athabascan people were particularly popular. Additional informal programs included wilderness medicine, wild edible and poisonous plants, flora identification, animal tracks, and birding.

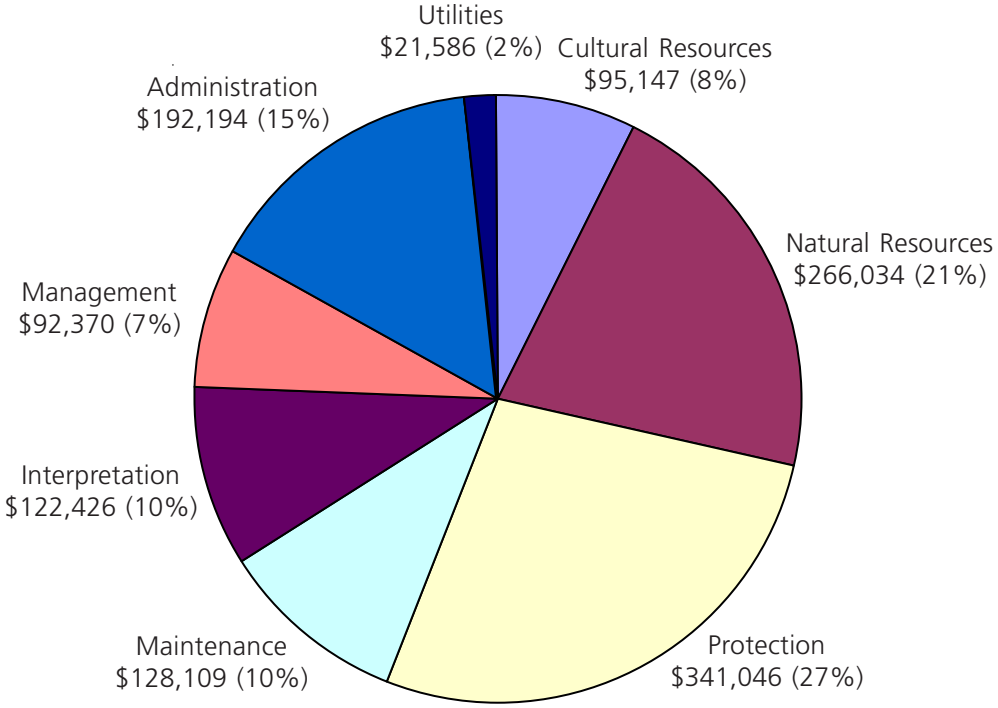
The long-standing partnership with the local Eagle Historical Society and Museums continued this season with interpretive staff conducting the walking tour of the historic district in Eagle each Tuesday. The town tour gives visitors the opportunity to enjoy the true flavor of Eagle as they visit each building along the tour.

As happens each year, the interpretive staff was augmented and strengthened through the efforts of volunteers. This year, volunteers accounted for many intuitive programs and display ideas. Without the dedication and contributions of partners, including volunteers, the special place we call Yukon-Charley Rivers would be sorely lacking.

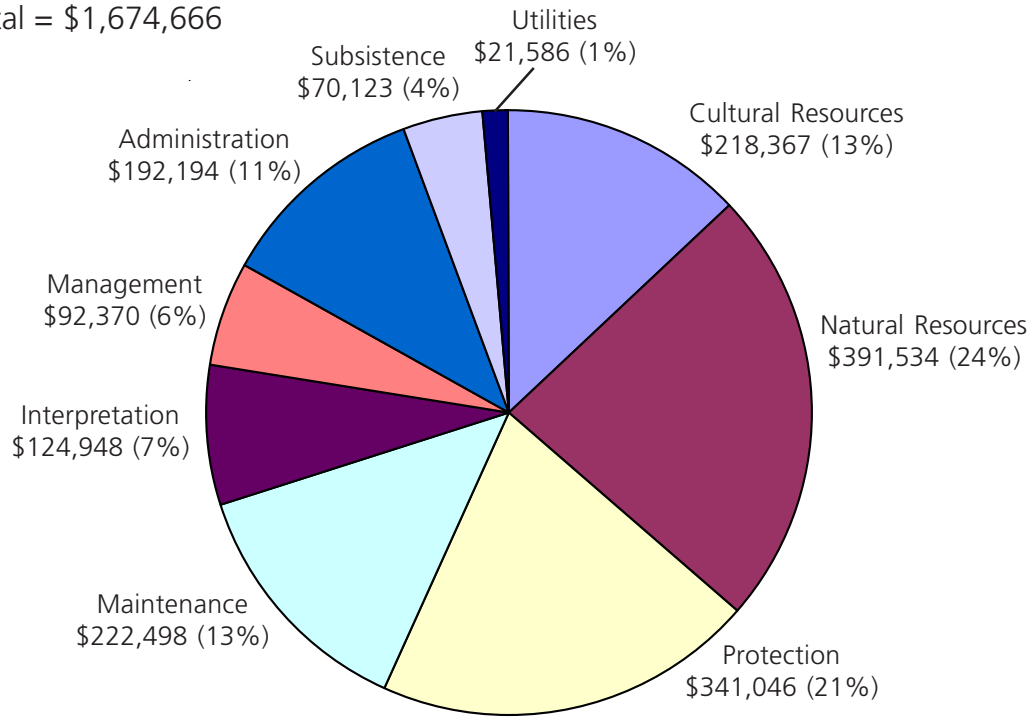
With the opening of the new comfort station in late August for a trial period, visitors were overjoyed. At the ribbon cutting ceremony, visitors applauded and laughed as they lined up to utilize the new facility.

Financial Summary

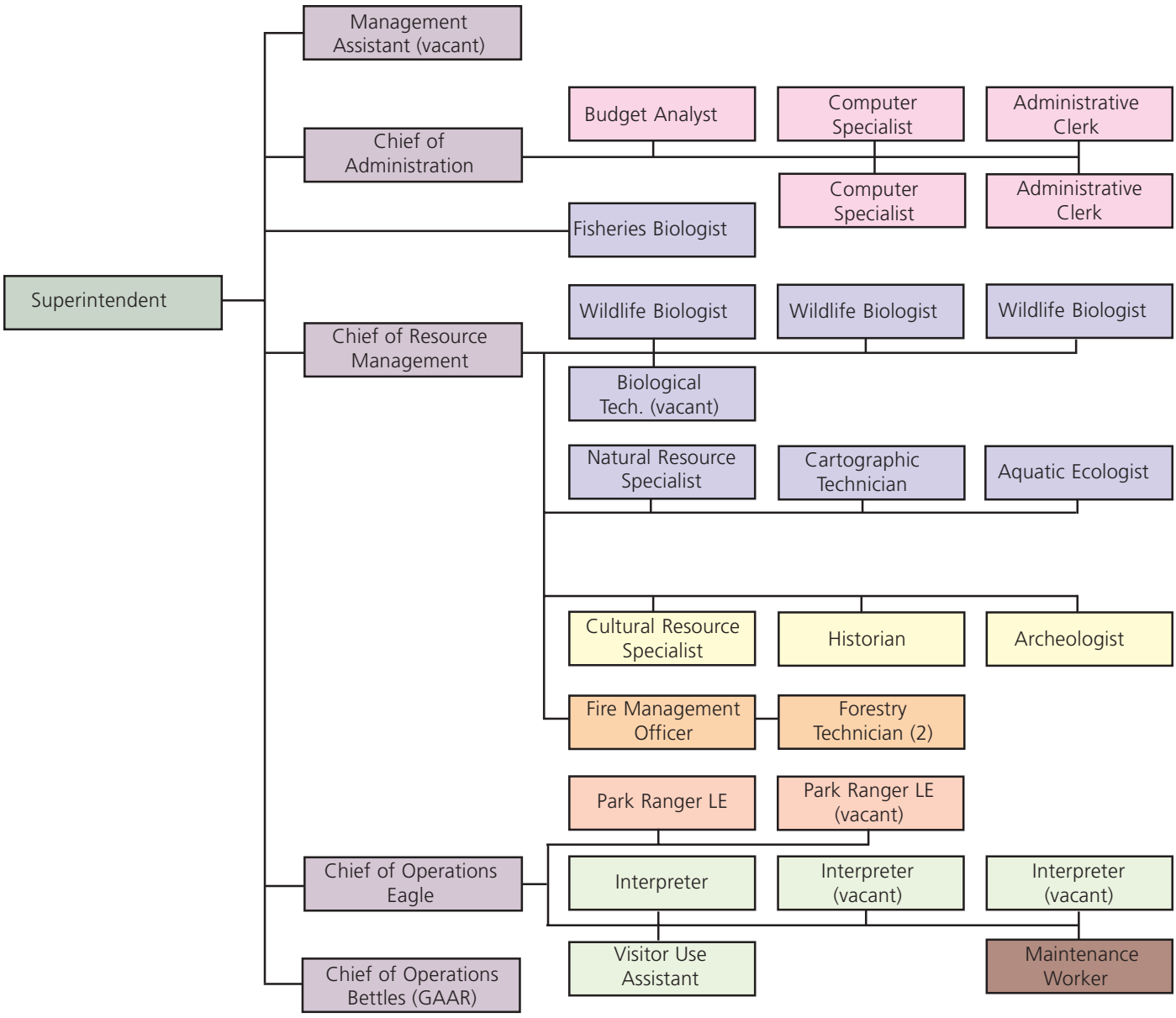
Operating Budget Base Allocations (ONPS) Expenditures
Total = $1,307,453



All Funding Sources, Including Project, Inventory & Monitoring, and Fishery Subsistence
Total = $1,674,666



Yukon-Charley Rivers National Preserve Organization



Note: All positions are shared with Gates of the Arctic National Park and Preserve except those under the Chief of Operations in Eagle.

"Yeah, that looks good!" Rangers adjust the binoculars on the viewing deck outside National Park Service Field Office in Eagle. Eagle Bluff, the base of which can be seen in this photo, has long been home to nesting Peregrine Falcons.

The National Park Service cares for special places saved by the American people so that all may experience our heritage.

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*U.S. Department of the Interior * National Park Service*